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PATENT ABSTRACTS OF JAPAN

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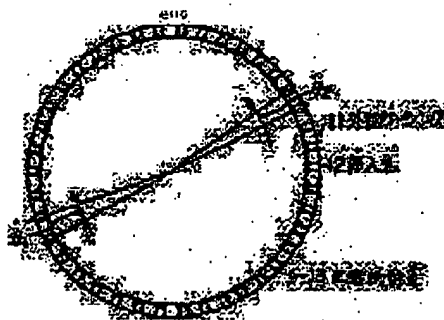
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(54) COMPRESSOR STATIONARY BLADE

(57)Abstract:

PROBLEM TO BE SOLVED: To avoid resonance of excitation force and a natural frequency of a moving blade, and to prevent damage of the moving blade by the resonance by setting circumferential directional arrangement of stationary blades to an unequal pitch in the stationary blades to control an air flow flowing in the moving blade arranged on the stationary blade backwash side of a compressor.

SOLUTION: In a compressor stationary blade 13 to control an air flow flowing in a moving blade, circumferential directional arrangement of an inserting hole 12 arranged by penetrating through an outside casing 11, is set so as to become different between the stationary blade number of the upper half part of the outside casing 11 and the stationary blade number of the lower half part. That is, a stationary blade 2 arranged in the upper half part of an air passage 7 is set to an upper half pitch angle ($\theta_2=9.43^\circ$), and a stationary blade 2 arranged in the lower half part is set to a lower half pitch angle ($\theta_1=8.57^\circ$). Thus, in the stationary blades 2 respectively arranged in the upper half part and the lower half part of the air passage 7, an interval between adjacent stationary blades 2 is set to a mutually different dimension to avoid generation of resonance of excitation force and a natural



frequency of the moving blade.

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